

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Richard R. REISMAN

Application No.: 09/553,337

Filed: April 20, 2000

For: **Method for Updating Software**

Confirmation No.: 5134

Art Unit: 2182

Examiner: PEYTON, TAMMARA R.

Atty. Docket: 2222.4310003

**Brief on Appeal Under 37 C.F.R. § 41.37**

*Mail Stop Appeal Brief - Patents*

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

A Notice of Appeal from the final Office Action, dated January 25, 2010, was filed on June 24, 2010. Appellant hereby files one copy of this Appeal Brief, together with the required fee set forth in 37 C.F.R. § 41.20(b)(2).

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

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***I. Real Party In Interest (37 C.F.R. § 41.37(c)(1)(i))***

The real party in interest in this appeal is Twintech E.U., L.L.C., having its principal place of business at 3411 Silverside Road, Wilmington, Delaware 19810. An assignment assigning all rights, title, and interest in and to the above-captioned patent application from BTG International, Inc. to Twintech E.U., L.L.C. was recorded in the U.S. Patent & Trademark Office (USPTO) on August 14, 2006 at Reel 018099, Frame 0184.

***II. Related Appeals and Interferences (37 C.F.R. § 41.37(c)(1)(ii))***

All other prior and pending appeals, interferences, or judicial proceedings known to Appellant, the Appellant's legal representative, or Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal are listed below:

This application is related to US Application 10/954,239, filed October 1, 2004 for which a Notice of Appeal was filed on August 4, 2010. The appeal is pending.

The listing of the above proceeding is not meant to be an admission that the proceeding directly affects, is directly affected by, or has a bearing on the Board's decision in the pending appeal.

***III. Status of Claims (37 C.F.R. § 41.37(c)(1)(iii))***

Claims 114-122, 124-126, 128-141, 143-145, 147-155, 157-161, 163-173, 175-179, and 181-202 are pending in this application. Claims 114-122, 124-126, 128-141, 143-145, 147-155, 157-161, 163-173, 175-179, and 181-202 are rejected. Claims 114-122, 124-126, 128-141, 143-145, 147-155, 157-161, 163-173, 175-179, and 181-202 are on appeal. A copy of the claims on appeal can be found in the attached Claims Appendix.

***IV. Status of Amendments (37 C.F.R. § 41.37(c)(1)(iv))***

Subsequent to the final Office Action dated January 25, 2010, an Amendment and Reply was filed on April 19, 2010. In the Amendment and Reply filed on April 19, 2010, claims 114, 133, 153, and 171 were amended.

In an Advisory Action mailed June 9, 2010, it was indicated that the Amendment, submitted in the Amendment and Reply filed on April 19, 2010, would not be entered because the Amendment allegedly raised new issues requiring further search. The claims on appeal are those of record submitted in the Amendment filed May 22, 2009.

**V. Summary of Claimed Subject Matter (37 C.F.R. § 41.37(c)(1)(v))**

Claimed are user stations and computer program products for communicating functional requests to any one of a plurality of available online services to support an application function.

The following claim charts provide a mapping of the independent claims onto non-limiting example text from the as filed specification and figures where appropriate. The mapping is not intended to be used for claim construction.

114. A computer program product comprising a tangible computer-readable medium having instructions stored thereon, the instructions comprising:	<i>See, e.g.</i> , p. 8, l. 5 - p. 9, l. 1.
first instructions, executable at a user station, for selecting among a plurality of available online services to support an application function, wherein the first instructions form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with the application function to any one of the plurality of available online services;	<i>See, e.g.</i> , p. 41, ll. 1-6; p. 42, ll. 1-13; Fig. 3, element 86.
second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and	<i>See, e.g.</i> , p. 11, ll. 13-25; p. 15, ll. 14-18; Fig. 1, element 38.
third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,	<i>See, e.g.</i> , p. 12, ll. 14 - p. 14, l. 15; Fig. 1, elements 12 and 28.
wherein portions of the third instructions are downloaded from the online service, and	<i>See, e.g.</i> , p. 12, ll. 14-21; p. 13, ll. 6-17;
wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.	<i>See, e.g.</i> , p. 12, l. 23 - p.13, l. 4; Fig. 3, element 86.

133. A user station, comprising a processor and a tangible computer-readable medium having instructions stored thereon, the instructions comprising:	<i>See, e.g., p. 8, l. 5 - p. 9, l. 1.</i>
first instructions, executable at the user station, for selecting among a plurality of available online services to support an application function, wherein the first computer program code includes an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with the application function to any one of the available online services;	<i>See, e.g., p. 41, ll. 1-6; p. 42, ll. 1-13; Fig. 3, element 86.</i>
second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and	<i>See, e.g., p. 11, ll. 13-25; p. 15, ll. 14-18; Fig. 1, element 38.</i>
third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,	<i>See, e.g., p. 12, ll. 14 - p. 14, l. 15; Fig. 1, elements 12 and 28.</i>
wherein portions of the third instructions are downloaded from the online service, and	<i>See, e.g., p. 12, ll. 14-21; p. 13, ll. 6-17;</i>
wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.	<i>See, e.g., p. 12, l. 23 - p.13, l. 4; Fig. 3, element 86.</i>

153. A computer program product comprising a tangible computer-readable medium having instructions stored thereon, the instructions comprising:	<i>See, e.g., p. 8, l. 5 - p. 9, l. 1.</i>
first instructions, executable at a user station, that form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with an application function to any one of a plurality of available online services;	<i>See, e.g., p. 41, ll. 1-6; p. 42, ll. 1-13; Fig. 3, element 86.</i>
second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of	<i>See, e.g., p. 11, ll. 13-25; p. 15, ll. 14-18; Fig. 1, element 38.</i>



available online services; and	
third computer program code, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,	<i>See, e.g.</i> , p. 12, ll. 14 - p. 14, l. 15; Fig. 1, elements 12 and 28.
wherein portions of the third computer program code are downloaded from the online service, and	<i>See, e.g.</i> , p. 12, ll. 14-21; p. 13, ll. 6-17;
wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.	<i>See, e.g.</i> , p. 12, l. 23 - p.13, l. 4; Fig. 3, element 86.

171. A user station, comprising a processor and a computer-readable medium having instructions stored thereon, the instructions comprising:	<i>See, e.g.</i> , p. 8, l. 5 - p. 9, l. 1.
first instructions, executable at a user station, that form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with an application function to any one of a plurality of available online services;	<i>See, e.g.</i> , p. 41, ll. 1-6; p. 42, ll. 1-13; Fig. 3, element 86.
second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and	<i>See, e.g.</i> , p. 11, ll. 13-25; p. 15, ll. 14-18; Fig. 1, element 38.
third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,	<i>See, e.g.</i> , p. 12, ll. 14 - p. 14, l. 15; Fig. 1, elements 12 and 28.
wherein portions of the third instructions are downloaded from the online service, and	<i>See, e.g.</i> , p. 12, ll. 14-21; p. 13, ll. 6-17;
wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.	<i>See, e.g.</i> , p. 12, l. 23 - p.13, l. 4; Fig. 3, element 86.

***VI. Grounds of Rejection to be Reviewed on Appeal (37 C.F.R. § 41.37(c)(1)(vi))***

A concise statement listing each ground of rejection for review follows.

***A. Ground 1***

Claims 114, 116-122, 124-126, 128-131, 133-141, 143-145, 147-150, 152, 153-155, 157-161, 163-172, 173, 175-179, 181-202 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,734,871 to Kleinerman (“Kleinerman”), “RIPscrip Graphics Protocol Specification,” July 19, 1993 (“RIPscrip”), Microsoft Press’ Computer Dictionary, 2<sup>nd</sup> Edition, 1993 (“Microsoft”), and U.S. Patent No. 5,630,125 to Zellweger (“Zellweger”).

***B. Ground 2***

Claims 115, 132, 151, 154, 172, and 175-190 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kleinerman, RIPscrip, Microsoft, Zellweger, , and U.S. Patent No. 6,031,977 to Pettus (“Pettus”).

**VII. Argument (37 C.F.R. § 41.37(c)(1)(vii))**

For each ground of rejection applying to two or more claims, the claims are argued either separately or as a group. When argued as a group, Appellant waives any argument that the Board must consider the patentability of any grouped claim separately. As provided below, there are two separate grounds of rejection to be reviewed on appeal.

**A. Rejection of claims 114, 116-122, 124-126, 128-131, 133-141, 143-145, 147-150, 152, 153-155, 157-161, 163-172, 173, 175-179, 181-202 under 35 U.S.C. § 103(a) over Kleinerman, RIPscrip, Microsoft, and Zellweger**

To establish *prima facie* obviousness of a claimed invention, all of the claim features must be taught or suggested by the prior art. MPEP 2143; *see also, In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Because the Examiner has failed to establish that the combination of Kleinerman, RIPscrip, Microsoft, and Zellweger teaches or suggests each and every feature of claims 114, 116-122, 124-126, 128-131, 133-141, 143-145, 147-150, 152, 153-155, 157-161, 163-172, 173, 175-179, 181-202, the Examiner has failed to establish a *prima facie* case of obviousness. Therefore, the rejection of those claims must be reversed. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

For example, as set forth in Appellant's reply dated May 22, 2009, RIPscrip, Microsoft, and Zellweger do not teach or suggest at least "an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with [an] application function to any one of [a] plurality of available online services" as recited in independent claims 114, 133, 153, and 171. Since RIPscrip, Microsoft, and Zellweger do not teach or suggest an API as noted above, logically RIPscrip, Microsoft, and Zellweger cannot teach or suggest "wherein the third instructions receive via the API a response to the

functional request from the online service in the background, thereby permitting the graphical user interface to continue operation” as further recited in independent claims 114, 133, 153, and 171. The Examiner does not contest this distinction, but rather relies on Kleinerman to cure this deficiency of RIPscrip, Microsoft, and Zellweger. (final Office Action mailed January 25, 2010, p. 8-11.)

Kleinerman is directed to a method and apparatus for controlling the execution of an application in a host computer that is under the control of a secondary computer. (Kleinerman, 5:20-64.) More specifically, Kleinerman purports to allow a user to work with an application in the host computer via a user interface at the secondary computer. (*Id.*) The interaction between the user interface at the secondary computer and the application residing on the host computer is carried out, at least in part, by an Application Interface Module (AIM), an application program interface, and a component referred to as the Watch Host Patterns (WHOOOP). (Kleinerman, 5:65-6:43, 7:51-54.) The AIM resides on the secondary computer and communicates with the WHOOOP, residing on the host computer, through the application program interface. (*Id.*) Kleinerman, at most, describes the functionality of the application program interface as “[a] mechanism to pass information from the WHOOOP to the AIM, to manage displays at the [secondary computer], and to accept input from the secondary computer.” (Kleinerman, 7:51-54.)

In rejecting claims 114, 133, 153, and 171, the Examiner improperly equates, in part, the application program interface of Kleinerman with the application programming interface (API) recited in claims 114, 133, 153, and 171.<sup>1</sup> (final Office

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<sup>1</sup> On page 10 of the final Office Action mailed January 25, 2010, the Examiner contends that Appellant previously argued “that Kleinerman *in effect* teaches away from API [sic] performing ‘in the background.’” Appellant respectfully submits that no such argument was made. Rather, Appellant previously argued in the reply dated May 22, 2009 that Kleinerman failed to teach or suggest an API that is configured to receive “a response to [a] functional request from [an] online service in the background” as recited in independent claims 114, 133, 153, and 171.

Action mailed January 25, 2010, p. 8-10.) The application program interface of Kleinerman falls well short of providing the non-obvious features of the API recited in claims 114, 133, 153, and 171. For example, Kleinerman does not teach or suggest that the application program interface is configured to receive “a response to [a] functional request from the online service in the background, thereby permitting the graphical user interface to continue operation” as recited in independent claims 114, 133, 153, and 171.

The Examiner appears to acknowledge that Kleinerman fails to teach this feature recited in claims 114, 133, 153, and 171. Specifically, the Examiner appears to assert that, although Kleinerman does not teach an API that is configured to receive “a response to [a] functional request from the online service in the background,” this feature, without any explicit disclosure or suggestion in Kleinerman, is nothing more than common knowledge and thus would have been obvious to a person of ordinary skill in the art. (final Office Action mailed January 25, 2010, p. 11.) Appellant respectfully disagrees.

The Examiner improperly takes what appears to be Official Notice that the feature of claims 114, 133, 153, and 171, noted above, is common knowledge or well known in the art. “It would *not* be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.” MPEP § 2144.03(A) (emphasis in original); *see also In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) (“[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice.”).

Here, the Examiner alleges the fact, without any documentary evidence, that an API configured to receive “a response to [a] functional request from [an] online service in the background,” as recited in claims 114, 133, 153, and 171, was common knowledge or well known in the art. (final Office Action mailed January 25, 2010, p. 11.) However, this alleged fact relates to “the state of the art” at the time of the earliest effective filing date of the instant application and is “subject to the possibility of rational disagreement among reasonable men.” *See In re Eynde*, 480 F.2d at 1370, 178 USPQ at 474. Appellant submits that in May 1994 the state of the art was such that this feature in question would not have been common knowledge. Thus, this is not the type of fact amenable to Official Notice, especially given that the earliest effective filing date for the instant application was fifteen years ago, when the internet was still in its infancy. In the absence of any documentary proof that this “fact” was amenable to Official Notice as of May 1994, Appellant contests the Examiner’s assertion of alleged fact.

Moreover, an API that is configured to receive “a response to [a] functional request from the online service in the background,” as recited in claims 114, 133, 153, and 171, provides for several non-obvious benefits that are not taught or suggested by Kleinerman. For example, an API configured to receive a response to a functional request from an online service in the background may allow a user interface to continue operation in between the time a functional request is sent to an online service and a response to the functional request is received from the online service. This may provide for a more dynamic application, eliminating the need for start and stop interactions between a client application and an online service. In addition, because the response is received from the online service in the background, any interaction with the online service can be transparent to a user. Appellant is not aware that such

background operations were in use or well known at the time of the earliest effective filing date of the instant application (May 31, 1994).

Thus, absent a reference demonstrating the aforementioned advantageous and non-obvious feature of claims 114, 133, 153, and 171 to be well known, the Examiner cannot properly rely on common knowledge in the art. MPEP § 2144.03(A).

For at least the foregoing reason, independent claims 114, 133, 153, and 171 are not rendered unpatentable over the combination of Kleinerman, RIPscrip, Microsoft, and Zellweger. Accordingly, Appellant respectfully requests that the rejection of claims 114, 133, 153, and 171 be reconsidered and withdrawn.

Dependent claims 116-122, 124-126, 128-131, 134-141, 143-145, 147-150, 152, 154-155, 157-161, 163-170, 172, 173, 175-179, 181-202 are similarly not rendered unpatentable over the combination of Kleinerman, RIPscrip, Microsoft, and Zellweger for at least the same reasons as claims 114, 133, 153, and 171, from which they respectively depend, and further in view of their own features. Accordingly, Appellant respectfully requests the rejection of claims 116-122, 124-126, 128-131, 134-141, 143-145, 147-150, 152, 154-155, 157-161, 163-170, 172, 173, 175-179, 181-202 be reconsidered and withdrawn.

**B. *Rejection of claims 115, 132, 151, 154, 172, and 175-190 under 35 U.S.C. § 103(a) over Kleinerman, RIPscrip, Microsoft, Zellweger, and Pettus***

Without acquiescing to the propriety of the asserted combination, Pettus does not cure the deficiencies of the RIPscrip, Microsoft, Zellweger, and Kleinerman with respect to independent claims 114, 133, 153, and 171 as noted above. Consequently, RIPscrip, Microsoft, Zellweger, Kleinerman, and Pettus do not support a § 103 rejection of independent claims 114, 133, 153, and 171. Dependent claims 115, 132, 151, 154, 172, and 175-190 are similarly not rendered unpatentable over the

combination of RIPscrip, Microsoft, Zellweger, Kleinerman, and Pettus for at least the same reasons as claims 114, 133, 153, and 171, from which they respectively depend, and further in view of their own features. Accordingly, Appellant respectfully requests the rejection of claims 115, 132, 151, 154, 172, and 175-190 be reconsidered and withdrawn.

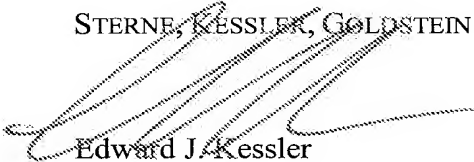


*VIII. Conclusion*

For the foregoing reasons, Appellant respectfully requests that the Board reverse the Examiner's rejection of claims 114-122, 124-126, 128-141, 143-145, 147-155, 157-161, 163-173, 175-179, and 181-202 and remand this application for issue.

Respectfully submitted,

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***IX. Claims Appendix***

1-113. (Cancelled)

114. A computer program product comprising a tangible computer-readable medium having instructions stored thereon, the instructions comprising:

first instructions, executable at a user station, for selecting among a plurality of available online services to support an application function, wherein the first instructions form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with the application function to any one of the plurality of available online services;

second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and

third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,

wherein portions of the third instructions are downloaded from the online service, and

wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.

115. The computer program product as set forth in Claim 114, further comprising a set of translators and protocol drivers for establishing the communication link between the user station and the online service.

116. The computer program product as set forth in Claim 114, further comprising protocol translation instructions for establishing the communication link between the user station and the online service.

117. The computer program product as set forth in Claim 114, wherein the API is configured to interconnect the online service selector function and the communications function.

118. The computer program product as set forth in Claim 114, further comprising data transport instructions for effectuating data transfers between the user station and the online service via the established communication link.

119. The computer program product as set forth in Claim 118, wherein the data transport instructions use an object manifest to effectuate data transfers.

120. The computer program product as set forth in Claim 119, wherein the API is configured to modify the object manifest.

121. The computer program product as set forth in Claim 120, wherein the API is configured to interconnect the data transfer function and a high-level software entity that can be invoked to modify the object manifest.

122. The computer program product as set forth in Claim 120, wherein the API is configured to interconnect the data transfer function and a high-level user interface that enables the user station to modify the object manifest.

123. (Cancelled)

124. The computer program product as set forth in Claim 114, wherein the first instructions are further configured to present a list of the available online services.

125. The computer program product as set forth in Claim 114, further comprising data transport instructions for effectuating data transfers between the user station and a selected one of the available online services via a non-proprietary network.

126. The computer program product as set forth in Claim 125, wherein the non-proprietary network comprises the Internet.

127. (Cancelled)

128. The computer program product as set forth in Claim 114, further comprising database function instructions for presenting a different database function for each different online service by a corresponding database function.

129. The computer program product as set forth in Claim 128, wherein portions of the database function instructions are downloaded from a corresponding online service.

130. The computer program product as set forth in Claim 114, further comprising general purpose user interface instructions for facilitating the presentation of the graphical user interface.

131. The computer program product as set forth in Claim 114, wherein the graphical user interface operates as a customized element of a common user interface software package.

132. The computer program product as set forth in Claim 114, wherein the first instructions are updateable from a remote source for expanding the number of available online services.

133. A user station, comprising a processor and a tangible computer-readable medium having instructions stored thereon, the instructions comprising:

first instructions, executable at the user station, for selecting among a plurality of available online services to support an application function, wherein the first computer program code includes an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with the application function to any one of the available online services;

second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and

third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,

wherein portions of the third instructions are downloaded from the online service, and

wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.

134. The user station as set forth in Claim 133, further comprising a set of translators and protocol drivers for establishing the communication link between the user station and the online service.

135. The user station as set forth in Claim 133, further comprising protocol translation instructions for establishing the communication link between the user station and the online service.

136. The user station as set forth in Claim 133, wherein the API is configured to interconnect the online service selector function and the communications function.

137. The user station as set forth in Claim 133, further comprising data transport instructions for effectuating data transfers between the user station and the online service via the established communication link.

138. The user station as set forth in Claim 137, wherein the data transport instructions use an object manifest to effectuate data transfers.

139. The user station as set forth in Claim 138, wherein the API is configured to modify the object manifest.

140. The user station as set forth in Claim 139, wherein the API is configured to interconnect the data transfer function and a high-level software entity that can be invoked to modify the object manifest.

141. The user station as set forth in Claim 139, wherein the API is configured to interconnect the data transfer function and a high-level user interface that enables the user station to modify the object manifest.

142. (Cancelled)

143. The user station as set forth in Claim 133, wherein the first program code is further configured to present the user station with a list of the available online services.

144. The user station as set forth in Claim 133, further comprising data transport instructions for effectuating data transfers between the user station and a selected one of the available online services via a non-proprietary network.

145. The user station as set forth in Claim 144, wherein the non-proprietary network comprises the Internet.

146. (Cancelled)

147. The user station as set forth in Claim 133, further comprising database function instructions, for presenting a different customized database function for each different online service by a corresponding database function.

148. The user station as set forth in Claim 147, wherein portions of the database function instructions are downloaded from a corresponding online service.

149. The user station as set forth in Claim 133, further comprising general purpose user interface instructions for facilitating the presentation of the graphical user interface.

150. The user station as set forth in Claim 133, wherein the graphical user interface operates as a customized element of a common user interface software package executable at the user station.

151. The user station as set forth in Claim 133, wherein the first instructions are updateable from a remote source for expanding the number of available online services.

152. The user station as set forth in Claim 133, wherein the user station is a personal computer.

153. A computer program product comprising a tangible computer-readable medium having instructions stored thereon, the instructions comprising:

first instructions, executable at a user station, that form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with an application function to any one of a plurality of available online services;

second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and

third computer program code, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,

wherein portions of the third computer program code are downloaded from the online service, and

wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.

154. The computer program product as set forth in Claim 153, further comprising a set of translators and protocol drivers for establishing the communication link between the user station and the online service.



155. The computer program product as set forth in Claim 153, further comprising protocol translation instructions for establishing the communication link between the user station and the online service.

156. (Cancelled)

157. The computer program product as set forth in Claim 153, further comprising data transport instructions for effectuating data transfers between the user station and the online service via the established communication link.

158. The computer program product as set forth in Claim 157, wherein the data transport function uses an object manifest to effectuate data transfers.

159. The computer program product as set forth in Claim 158, wherein the API is configured to modify the object manifest.

160. The computer program product as set forth in Claim 159, wherein the API is configured to interconnect the data transfer function and a high-level software entity that can be invoked to modify the object manifest.

161. The computer program product as set forth in Claim 159, wherein the API is configured to interconnect the data transfer function and a high-level user interface that enables the user station to modify the object manifest.

162. (Cancelled)

163. The computer program product as set forth in Claim 153, wherein the first instructions are further configured to present a list of the available online services.

164. The computer program product as set forth in Claim 153, further comprising data transport instructions for effectuating data transfers between the user station and a selected one of the available online services via a non-proprietary network.

165. The computer program product as set forth in Claim 164, wherein the non-proprietary network comprises the Internet.

166. The computer program product as set forth in Claim 153, further comprising database function instructions for presenting the user station with a different customized database for each different online service by a corresponding database function.

167. The computer program product as set forth in Claim 166, wherein portions of the database function instructions are downloaded from a corresponding online service in advance of their execution.

168. The computer program product as set forth in Claim 153, further comprising general purpose user interface instructions for facilitating the presentation of the graphical user interface.

169. The computer program product as set forth in Claim 153, wherein the graphical user interface operates as a customized element of a common user interface software package.

170. The computer program product as set forth in Claim 153, wherein the first instructions are updateable from a remote source for expanding the number of available online services.

171. A user station, comprising a processor and a computer-readable medium having instructions stored thereon, the instructions comprising:

first instructions, executable at a user station, that form an application programming interface (API) configured to provide a generic client interface for communicating a functional request associated with an application function to any one of a plurality of available online services;

second instructions, executable at the user station, for directing the establishment and use of a communication link between the user station and an online service selected from the plurality of available online services; and

third instructions, executable at the user station, for presenting a graphical user interface, generating the functional request, and communicating the functional request to the online service using the API,

wherein portions of the third instructions are downloaded from the online service, and

wherein the third instructions receive via the API a response to the functional request from the online service in the background, thereby permitting the graphical user interface to continue operation.

172. The user station as set forth in Claim 171, further comprising a set of translators and protocol drivers for establishing the communication link between the user station and the online service.

173. The user station as set forth in Claim 171, further comprising protocol translation instructions for establishing the communication link between the user station and the online service.

174. (Cancelled)

175. The user station as set forth in Claim 171, further comprising data transport instructions for effectuating data transfers between the user station and the online service via the established communication link.

176. The user station as set forth in Claim 175, wherein the data transport function uses an object manifest to effectuate data transfers.

177. The user station as set forth in Claim 176, wherein the API is configured to modify the object manifest.

178. The user station as set forth in Claim 177, wherein the API is configured to interconnect the data transfer function and a high-level software entity that can be invoked to modify the object manifest.

179. The user station as set forth in Claim 177, wherein the API is configured to interconnect the data transfer function and a high-level user interface that enables the user station to modify the object manifest.

180. (Cancelled)

181. The user station as set forth in Claim 171, wherein the first instructions are further configured to present a list of the available online services.

182. The user station as set forth in Claim 171, further comprising data transport instructions for effectuating data transfers between the user station and a selected one of the available online services via a non-proprietary network.

183. The user station as set forth in Claim 182, wherein the non-proprietary network comprises the Internet.

184. The user station as set forth in Claim 171, further comprising database function instructions for presenting a different customized database for each different online service by a corresponding database function.

185. The user station as set forth in Claim 184, wherein portions of the database function instructions are downloaded from a corresponding online service.

186. The user station as set forth in Claim 171, further comprising general purpose user interface instructions for facilitating the presentation of the graphical user interface.

187. The user station as set forth in Claim 171, wherein the graphical user interface operates as a customized element of a common user interface software package.

188. The user station as set forth in Claim 171, wherein the first instructions are updatable from a remote source for expanding the number of available online services.

189. The computer program product as set forth in Claim 114, wherein the graphical user interface includes at least one element that is effected by instructions that are custom to the online service.

190. The user station as set forth in Claim 133, wherein the graphical user interface includes at least one element that is effected by instructions that are custom to the online service.

191. The computer program product as set forth in Claim 153, wherein the graphical user interface includes at least one element that is effected by instructions that are custom to the online service.

192. The user station as set forth in Claim 171, wherein the graphical user interface includes at least one element that is effected by instructions that are custom to the online service.

193. The computer program product as set forth in Claim 189, wherein portions of the at least one element are downloaded from the online service.

194. The user station as set forth in Claim 190, wherein portions of the at least one element are downloaded from the online service.

195. The computer program product as set forth in Claim 191, wherein portions of the at least one element are downloaded from the online service.

196. The user station as set forth in Claim 192, wherein portions of the at least one element are downloaded from the online service.

197. The computer program product as set forth in Claim 114, wherein the functional request is for updates to information stored at the user station.

198. The computer program product of Claim 197, wherein the third instructions are further configured to integrate the updates to information, received from the online service in response to the functional request, with the information stored at the user station.

199. The computer program product of Claim 114, wherein the third instructions are further configured to present different customized graphical user interfaces for different selected online services.

200. The user station as set forth in Claim 133, wherein the functional request is for updates to information stored at the user station.

201. The user station as set forth in Claim 200, wherein the third instructions are further configured to integrate the updates to information, received from the online service in response to the functional request, with the information stored at the user station.

202. The user station as set forth in Claim 133, wherein the third instructions are further configured to present different customized graphical user interfaces for different selected online services.

***X. Evidence Appendix***

None.



***XI. Related Proceedings Appendix***

None.